REMARKS

Reconsideration of the above-referenced application in view of the above amendment, and of the following remarks, is respectfully requested.

Claims 1-9 and 11-15 are pending in this case. Claims 1 and 9 are amended herein and claim 10 is cancelled herein.

Applicant notes that the Examiner has not rejected claims 2 and 10, although they are listed as being rejected in the Office Action Summary. Elements of claim 10 have been incorporated into claim 9.

The Examiner rejected claims 1, 3, 6, 7, 8, 9, 13, 14, and 15 under 35 U.S.C. 102(b) as being anticipated by Sun (U.S. Patent 6,200,629B1).

Applicant respectfully submits that amended claim 1 is unanticipated by Sun as there is no disclosure or suggestion in Sun of performing the following steps in order: depositing a material over the top metal interconnect level; patterning and etching the material to form a bottom electrode on the first metal interconnect line and a cladding on the second metal interconnect line; forming a capacitor dielectric layer over the bottom electrode; and forming a top electrode layer over the capacitor dielectric. Sun teaches a method of forming a capacitor above a metal interconnect line. A bottom electrode material is deposited and then the capacitor dielectric is deposited. However, the bottom electrode is not patterned and etched until after the top electrode is formed in contrast to the claim requirements. Accordingly, Applicant respectfully submits that claim 1 and the claims dependent thereon are unanticipated by Sun.

Applicant respectfully submits that amended claim 9 is unanticipated by Sun as there is no disclosure or suggestion of a decoupling capacitor located over a topmost metal interconnect level, a cladding on the second metal interconnect line, wherein the cladding and the bottom electrode comprise the same material; and an aluminum cap

layer electrically connecting a top electrode of said decoupling capacitor to said second copper interconnect line. Sun teaches a capacitor over a metal interconnect line and a second metal interconnect line, but fails to disclose or suggest an aluminum cap layer electrically connecting the top electrode to the second metal interconnect line. Accordingly, Applicant respectfully submits that claim 9 and the claims dependent thereon are unanticipated by Sun.

The Examiner rejected claims 1, 3, 6, 8, 9, 13, and 15 under 35 U.S.C. 102(b) as being anticipated by Quek et al. (U.S. Patent 6,261,917B1).

Applicant respectfully submits that amended claim 1 is unanticipated by Quek as there is no disclosure or suggestion in Quek of performing the following steps in order: depositing a material over the top metal interconnect level; patterning and etching the material to form a bottom electrode on the first metal interconnect line and a cladding on the second metal interconnect line; forming a capacitor dielectric layer over the bottom electrode; and forming a top electrode layer over the capacitor dielectric. Quek teaches a method of forming a capacitor above a metal interconnect line. A bottom electrode material is deposited and then the capacitor dielectric is formed. However, the bottom electrode is not patterned and etched until after the top electrode is formed in contrast to the claim requirements. Accordingly, Applicant respectfully submits that claim 1 and the claims dependent thereon are unanticipated by Quek.

Applicant respectfully submits that amended claim 9 is unanticipated by Quek as there is no disclosure or suggestion of a decoupling capacitor located over a topmost metal interconnect level, a cladding on the second metal interconnect line, wherein the cladding and the bottom electrode comprise the same material; and an aluminum cap layer electrically connecting a top electrode of said decoupling capacitor to said second copper interconnect line. Quek teaches a capacitor between two metal via levels, but does not teach a decoupling capacitor over a topmost metal interconnect level, as required by the claim. Furthermore, Quek teaches a capacitor over a metal via and a second metal interconnect line, but fails to disclose or suggest an aluminum cap layer

electrically connecting the top electrode to the second metal interconnect line. Accordingly, Applicant respectfully submits that claim 9 and the claims dependent thereon are unanticipated by Quek.

The Examiner rejected claims 4, 5, 11, and 12 under 35 U.S.C.§ 103(a) as being unpatentable over Quek et al. (U.S. Patent 6,261,917B1) in view of Shao et al. (U.S. Patent 6,117,747).

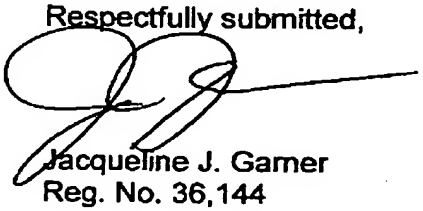
Applicant respectfully submits that claims 4 and 5 are patentable over the references for the same reasons discussed above relative to claim 1 from which these claims depend. Shao is added to teach top and bottom electrodes comprising TaN.

Applicant respectfully submits that claims 11 and 12 are patentable over the references for the same reasons discussed above relative to claim 9 from which these claims depend. Shao is added to teach top and bottom electrodes comprising TaN.

The other reference cited by the Examiner has been reviewed, but is not felt to come within the scope of the claims as amended.

In light of the above, Applicant respectfully requests withdrawal of the Examiner's rejections and allowance of claims 1-9 and 11-15. If the Examiner has any questions or other correspondence regarding this application, Applicant requests that the Examiner contact Applicant's attorney at the below listed telephone number and address.

Respectfully submitted,



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